

Compressed Natural Gas in Iowa

**State of Iowa Requirements and Procedures
for Commercialization and Sale**

As of September 2013

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Executive Summary

This document is specific to the state of Iowa and outlines the requirements and procedures necessary to use, distribute, and service compressed natural gas (CNG) and the equipment associated with it. Four state agencies' requirements for CNG are covered in this document: The Iowa Utilities Board (IUB), Iowa Department of Agriculture and Land Stewardship (IDALS)/ Weights and Measures Bureau, Iowa Department of Revenue (IDR) and Iowa Department of Public Safety (IDPS) / Division of the State Fire Marshal.

- **IUB:** Iowa Code Section 476.87 requires that competitive natural gas providers (CNGPs) have a certificate issued by the IUB in order to provide competitive natural gas services within the state of Iowa. The potential provider must complete an application and file it electronically with the IUB, as well as pay an application fee of \$125. You may request material to be held confidentially.

Once certified, CNGPs are required to file an annual report with the IUB on April 1 of each year. In addition to the annual report, all CNGPs certified to provide service to small volume customers are required to provide a monthly report to the IUB.

- **IDALS:** In order for a dealer to distribute CNG, each dispenser must have a Certificate of Conformance (COC) from the National Type Evaluation Program (NTEP). There is also specific information that must be posted on each dispenser. This includes Gasoline Liter Equivalent (GLE) or Gasoline Gallon Equivalent (GGE), units, price per unit, and total price.

To obtain a servicers license, the applicant must demonstrate that they have available adequate testing equipment and they possess a working knowledge of all devices the servicer intends to install or repair, as well as all appropriate weights, measures, statutes, and rules. There is no State of Iowa qualifying examination for CNG service companies, thus IDALS will work with the applicant to ensure that adequate equipment has been procured and proper procedures, as outlined by NIST, are being followed.

- **IDR:** In order for taxes to be collected or remitted on compressed natural gas (CNG) in Iowa, a license must be issued by IDR. IDR issues the appropriate license after receiving the required application. There are three types of CNG licenses in Iowa: dealer, user, and consolidated.

The tax rate of CNG in Iowa is 16¢/100 cubic feet. The CNG fuel is not taxed until it is delivered into equipment for compressing the gas for subsequent delivery into the fuel supply tank of a vehicle. The tax shall be remitted each month after the license is approved. Licensees will be contacted by IDR once the license is issued.

- **IDPS / Division of the State Fire Marshal:** Motor fuel-dispensing facilities for compressed natural gas (CNG) fuel shall be in accordance with Sections 2208 and 2111 of Chapter 22 and Section 3003 of Chapter 30 of the 2009 International Fire Code. The fuel-dispensing facilities, storage containers and repair garages must all be approved, listed, secure and equipped with the necessary additions to make them as safe and efficient as possible. The handling of these systems, as well as the natural gas itself, should be handled by trained personnel.

Inquiries about Liquefied Natural Gas (LNG) standards and requirements should be directed to each agency's contacts as provided in this document.

Iowa Utilities Board (IUB)

Iowa Code Section 476.87 requires that competitive natural gas providers (CNGPs) have a certificate issued by the IUB in order to provide competitive natural gas services within the state of Iowa. The potential provider must complete an application and file it electronically with the IUB, as well as pay an application fee of \$125. Interested parties may request material to be held confidentially. Once certified, CNGPs are required to file an annual report with the IUB on April 1 of each year.

Certification Requirements

CNGPs must receive a certificate in order to provide competitive natural gas services to Iowa retail end users. Information, including the administrative rules and filing instructions, can be found on the IUB website at <http://www.state.ia.us/government/com/util/energy/cngp/cngp.html>. A link to the form contained in 199 IAC 2.2.(18) is included below.

CNGP certification by the IUB is required by Iowa Code Section 476.87. Competitive natural gas providers and aggregators are defined in Iowa Code Section 476.86:

1. "Aggregator" means a person who combines retail end users into a group and arranges for the acquisition of competitive natural gas services without taking title to those services.
2. "Competitive natural gas provider" means a person who takes title to natural gas and sells it for consumption by a retail end user in the state of Iowa. "Competitive natural gas provider" includes an affiliate of an Iowa gas utility.

"Competitive natural gas provider" does not include the following:

- a. A public utility which is subject to rate regulation under this chapter.
- b. A municipally owned utility which provides natural gas service within its incorporated area or within the municipal natural gas competitive service area, as defined in Iowa Code § 437A.3(22)(a)(1), in which the municipally owned utility is located.

Retailers of compressed natural gas (CNG) for motor vehicles fall under this definition and so must obtain a CNGP Certificate from the IUB. CNG retailers fall within the definition of a small volume provider and so must provide the initial information required in numbered paragraph 6 of the application form in addition to the other information specified on the form. If there are questions about the specific information required, you may contact Barb Oswalt at the IUB for additional information at (515)725-7342 or barb.oswalt@iub.iowa.gov. CNGP applications are to be filed via the IUB's electronic filing system (EFS). Information on EFS is available at the following link: <https://efs.iowa.gov/efs/>. An application fee of \$125 should be mailed to the IUB at 1375 E. Court Avenue, Room 69, Des Moines, Iowa 50319-0069 addressed to the Executive Secretary.

Once filed, if the application is deficient, applicants will be notified and given 30 days to remedy deficiencies. Applications are considered complete when all required materials have been submitted. CNGP applicants are notified by letter delivered via EFS when applications are complete and at this

time the IUB's 90-day review period commences. The IUB will act on applications within 90 days unless the IUB determines that an additional 60 days is necessary.

The applicant is required to notify the IUB during the certification proceeding and/or after certification of any material change in the representations and commitments required for certification within 14 days of the change. Material changes requiring notification include, but are not limited to, CNGP name changes, changes in business structure, and changes in ownership. Once a CNGP has been granted a certificate to provide natural gas services in Iowa, the CNGP is required to file an annual report by April 1st each year via the IUB's EFS system.

How to File a CNGP Application

CNGP applications are to be **filed electronically** with the IUB. To submit a filing or to register for a user account, please visit the EFS home page at <https://efs.iowa.gov/efs/>. CNGP applications will be held in the EFS system until the application fee of \$125 is received. After the applicant uploads the application to the EFS, the application fee should be mailed to the executive secretary at Iowa Utilities Board, 1375 E. Court Avenue, Room 69, Des Moines, Iowa 50319-0069. Once the application fee is received, the application will be processed.

CNGP Application Form:

<https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/11-28-2012.Rule.199.2.2.pdf>

CNGP Application Rules:

<https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/11-28-2012.Rule.199.19.14.pdf>

Requesting to File Confidential Materials

All filings with the IUB are to be made electronically through its EFS. To submit a filing or to register for a user account, please visit the EFS home page at <https://efs.iowa.gov/efs/>.

Applicants may request material to be held confidential in a CGP filing according to IUB rule 199 IAC 1.9(6). If a request for confidentiality complies with the requirements below, the materials in your filing will be temporarily withheld from public inspection until the IUB approves or denies the request.

The rules governing confidential treatment of materials are [199 IAC 1.9\(6\)](#). Confidential treatment may be requested the annual information requirements, except for the total annual gross revenues for Iowa operations, which are made public pursuant to [Iowa Code § 476.10](#). If an applicant wishes to seek confidential treatment for this information, they must file a Request for Confidentiality (Request) with the IUB.

A Request for confidentiality must include the legal basis for withholding the materials from public inspection and the facts relied upon in support of the legal basis. The Request must be supported by an affidavit executed by a corporate officer or by an individual, if not a business entity, with personal knowledge of the specific facts. If the materials are requested to be withheld from public inspection for only a limited period of time, the period must be specified.

When electronically filing a document containing confidential information, a person shall file one public version of the document with the confidential information redacted according to the IUB's standards for

electronic information and one version of the document containing the confidential information. The two versions of the document shall be named according to the following convention: "Document Title – Public" and "Document Title – Confidential." It is the responsibility of the person submitting a public version of the electronic document to take appropriate measures to ensure that any embedded information for which confidential treatment is sought is non-viewable, non-searchable, and nonreversible. Each page of the confidential version of the document shall be marked in a way that identifies it as belonging to the confidential version of the document. The confidential material itself shall be highlighted or otherwise distinguished on the page to identify what specific information is confidential.

If a Request complies with the procedure outlined here and the content of the Request as described above, then the materials will be temporarily withheld from public inspection until the IUB examines the documents to determine whether confidentiality is granted. If the Request is granted, the ruling will be placed in a public file in lieu of the materials withheld from public inspection. If the Request is denied, the documents will be held confidential for 14 days to allow the applicant an opportunity to seek injunctive relief. After the 14 days expire, the materials will be available for public inspection, unless the IUB is directed by a court to keep the information confidential.

CNGP Reports and Name Changes

Annual Information

Pursuant to [199 IAC 19.14\(5\)"c"](#) all CNGPs are required to file an annual report with the IUB on April 1 of each year through the EFS system.

1. The average number of small volume end users served per month.
2. The average number of large volume end users served per month.
3. The total volume of sales to small volume end users, by month.
4. The total volume of sales to large volume end users, by month.
5. The revenue collected from small volume end users for competitive natural gas services, excluding any revenue collected from end users on behalf of utilities.
6. The revenue collected from large volume end users for competitive natural gas services, excluding any revenue collected from end users on behalf of utilities.
7. The date the applicant began providing service in Iowa.

CNGP Name Changes

If an Iowa CNGP changes its name or any other representations or commitments made in its initial filing, it must notify the IUB of any such changes within 14 days of the change. This would also include any changes in address, telephone number, contact person, etc. In the case of a name change, the IUB would issue a new certificate reflecting the new name. This notification is required by [199 IAC 19.14\(3\)](#). When filing a Notice of Change with the IUB, CNGPs should reference the docket number assigned to the original application for certification, i.e. Docket No. CGP-XXXX-XXXX. CNGPs should follow the IUB's standard filing procedure when submitting this information.

Current Certified Natural Gas Providers in Iowa:

<http://www.state.ia.us/government/com/util/docs/misc/CNGP/CNGPs.pdf>

Iowa Department of Agriculture and Land Stewardship (IDALS)/ Weights and Measures Bureau

In order for a dealer to distribute CNG, each dispenser must have a Certificate of Conformance (COC) from the National Type Evaluation Program (NTEP). This Certificate indicates that the device has met applicable requirements for commercial weighing and measuring equipment in the U.S. as specified by the National Institute of Standards and Technology (NIST). There is also specific information that must be posted on each dispenser. This includes Gasoline Liter Equivalent (GLE) or Gasoline Gallon Equivalent (GGE), units, price per unit, and total price.

To obtain a servicers license, the applicant must demonstrate that they have available adequate testing equipment and they possess a working knowledge of all devices the servicer intends to install or repair, as well as all appropriate weights, measures, statutes, and rules. There is no State of Iowa qualifying examination for CNG service companies, thus IDALS will work with the applicant to ensure that adequate equipment has been procured and proper procedures, as outlined by NIST, are being followed.

Dispenser Certification

Commercial measuring devices must have a “Certificate of Conformance” (COC) from the National Type Evaluation Program.

Information to be Posted at the Dispenser

(1) Gasoline Liter Equivalent (GLE) or Gasoline Gallon Equivalent (GGE)

NIST Handbook 130 (2009 edition, as adopted by current IDALS Administrative Rules, available at <http://ts.nist.gov/WeightsAndMeasures/Publications/H130-09.cfm>), page 127, states:

2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel.

2.27.1. Definitions.

2.27.1.1. Natural gas. – A gaseous fuel composed primarily of methane that is suitable for compression and dispensing into a fuel storage container(s) for use as an engine fuel.

2.27.1.2. Gasoline liter equivalent (GLE). – Gasoline liter equivalent (GLE) means 0.678 kg of natural gas.

2.27.1.3. Gasoline gallon equivalent (GGE). – Gasoline gallon equivalent (GGE) means 2.567 kg (5.660 lb) of natural gas.

2.27.2. Method of Retail Sale and Dispenser Labeling.

2.27.2.1. Method of retail sale. – All natural gas kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in terms of the gasoline liter equivalent (GLE) or gasoline gallon equivalent (GGE).

2.27.2.2. Dispenser labeling. – All retail natural gas dispensers shall be labeled with the conversion factor in terms of kilograms or pounds. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement “1 Gasoline Liter Equivalent (GLE) is equal to 0.678 kg of Natural Gas” or “1 Gasoline Gallon Equivalent (GGE) is equal to 5.660 lb of Natural Gas” consistent with the method of sale used.

And, NIST Handbook 44 (2009 edition, as adopted by current IDALS Administrative Rules, available at <http://ts.nist.gov/WeightsAndMeasures/Publications/H44-09.cfm>) also requires the GLE or GGE on the dispenser, page 3-87 states:

S.5.2. Marking of Gasoline Volume Equivalent Conversion Factor. – A device dispensing compressed natural gas shall have either the statement “1 Gasoline Liter Equivalent (GLE) is Equal to 0.678 kg of Natural Gas” or “1 Gasoline Gallon Equivalent (GGE) is Equal to 5.660 lb of Natural Gas” permanently and conspicuously marked on the face of the dispenser according to the method of sale used.

(Added 1994)

(2) *Units, price per unit, and total price*

From NIST Handbook 44, page 3-81 states:

S.1. Indicating and Recording Elements.

S.1.1. Indicating Elements. – A measuring assembly shall include an indicating element. Indications shall be clear, definite, accurate, and easily read under normal conditions of operation of the instrument.

S.1.2. Compressed Natural Gas Dispensers. – Except for fleet sales and other price contract sales, a compressed natural gas dispenser used to refuel vehicles shall be of the computing type and shall indicate the quantity, the unit price, and the total price of each delivery. The dispenser shall display the mass measured for each transaction either continuously on an external or internal display accessible during the inspection and test of the dispenser, or display the quantity in mass units by using controls on the device. (Added 1994)

S.1.3. Units.

S.1.3.1. Units of Measurement. – Deliveries shall be indicated and recorded in grams, kilograms, metric tons, pounds, tons, and/or liters, gallons, quarts, pints and decimal subdivisions thereof. The indication of a delivery shall be on the basis of apparent mass versus a density of 8.0 g/cm^3 . The volume indication shall be based on the mass measurement and an automatic means to determine and correct for changes in product density. (Amended 1993 and 1997)

S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel. – When compressed natural gas is dispensed as an engine fuel, the delivered quantity shall be indicated in “gasoline liter equivalent (GLE) units” or “gasoline gallon equivalent (GGE) units” (see definitions).

(Added 1994)

S.1.3.2. Numerical Value of Quantity-Value Divisions. – The value of a scale interval shall be equal to:

- (a) 1, 2, or 5, or
- (b) a decimal multiple or submultiple of 1, 2, or 5.

S.1.3.3. Maximum Value of Quantity-Value Divisions.

- (a) The maximum value of the quantity-value division for liquids shall be not greater than 0.2 % of the minimum measured quantity.
- (b) For dispensers of compressed natural gas used to refuel vehicles, the value of the division for the gasoline liter equivalent shall not exceed 0.01 GLE; the division for gasoline gallon equivalent (GGE) shall not exceed 0.001 GGE. The maximum value of the mass division shall not exceed 0.001 kg or 0.001 lb. (Amended 1994)

S.1.3.4. Values Defined. – Indicated values shall be adequately defined by a sufficient number of figures, words, symbols, or combinations thereof. A display of “zero” shall be a zero digit for all displayed digits to the right of the decimal mark and at least one to the left.

S.2. Operating Requirements.

S.2.1. Return to Zero. – Except for measuring assemblies in a pipeline:

- (a) One indicator and the primary recording elements, if the device is equipped to record, shall be provided with a means for readily returning the indication to zero either automatically or manually.
- (b) It shall not be possible to return primary indicating elements, or primary recording elements, beyond the correct zero position. (Amended 1993)

S.2.2. Indicator Reset Mechanism. – The reset mechanism for the indicating element shall not be operable during a delivery. Once the zeroing operation has begun, it shall not be possible to indicate a value other than the latest measurement, or “zeros” when the zeroing operation has been completed.

S.2.3. Nonresettable Indicator. – An instrument may also be equipped with a nonresettable indicator if the indicated values cannot be construed to be the indicated values of the resettable indicator for a delivered quantity.

NIST Handbook 44 has additional requirements concerning hose length and printed tickets. This can be found in Section 3.37 Mass Flow Meters, Users Requirements.

How to Obtain an Iowa Servicer License

Iowa Code, chapter 215 (<http://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.215.pdf>) states:

215.23 Servicer’s license.

A servicer shall not install, service, or repair a commercial weighing or measuring device until the servicer has demonstrated that the servicer has available adequate testing equipment, and that the servicer possesses a working knowledge of all devices the servicer intends to install or repair and of all appropriate weights, measures, statutes, and rules, as evidenced by passing a qualifying examination to be conducted by the department and obtaining a license. The secretary of agriculture shall establish by rule pursuant to chapter 17A, requirements for and contents of the examination. In determining these qualifications, the secretary shall consider the specifications of the United States national institute of standards and technology, handbook forty-four, “*Specifications, tolerances, and technical requirements for commercial weighing and measuring devices*”, or the current successor or equivalent specifications adopted by the United States national institute of standards and technology. The secretary shall require an annual license fee of not more than five dollars for each license. Each license shall expire one year from date of issuance.

Please note that currently, there is no State of Iowa qualifying examination for CNG service companies, thus IDALS will work with the applicant who wishes to become a licensed service provider, to ensure that adequate equipment has been procured and proper procedures, as outlined by NIST, are being followed.

The application is available at

<http://www.agriculture.state.ia.us/weightAndMeasures/forms/ElectronicServicersApplication.pdf>

If the applicant does not chose to immediately become a service company, IDALS can provide names of other local licensed service companies that work on petroleum dispensers, and may be willing to expand their expertise into CNG.

Appropriate Testing Equipment and Examination Procedure for CNG

NIST Handbook 112 (2002 version, available at <http://ts.nist.gov/WeightsAndMeasures/h112pdf.cfm>) contains the Examination Procedure Outline (EPO) for CNG dispensers, starting on page 28-2. When IDALS inspects the dispenser, they will follow the EPO – and thus licensed service companies shall also adhere to the EPO. The EPO contains a list of equipment needed for testing.

To purchase the necessary equipment, IDALS suggests going through Rice Lake (www.ricelake.com). In addition, the weights (the EPO refers to weights as ‘mass standards’ on the equipment list) must be annual certified by a traceable metrology lab. The metrology lab function has been moved from the Iowa Department of Agriculture & Land Stewardship to Ellsworth Community College in Iowa Falls, IA. Andrew Blackburn is the State Metrologist, and can be contacted at (641)648-8738.

For further information, contact IDALS Weights and Measures Bureau at (515)725-1492.

Iowa Department of Revenue (IDR)

Compressed Natural Gas (CNG) isn't subject to Iowa fuel tax until it is delivered into equipment for compressing the gas for subsequent delivery into the fuel supply tank of a vehicle. In order for fuel tax to be collected or remitted on CNG in Iowa, a license must be issued by IDR.

There are three types of CNG licenses in Iowa:

- CNG Dealer
- CNG User
- CNG Consolidated Location

IDR issues the appropriate license after receiving the required application. The tax is remitted each month after the license is approved. Licensees will be contacted by the Department with additional information once the license is issued.

Applying for an Iowa Fuel Tax License

The application for a license can be found at <http://www.iowa.gov/tax/forms/80001.pdf>.

Compressed Natural Gas (CNG) License Types

Dealer (09) - A person in the business of handling untaxed CNG who delivers any part of the fuel into a fuel supply tank of any motor vehicle. A dealer may also fuel the dealer's own vehicles under this license.

User (10) - A person who dispenses compressed natural gas for highway use, upon which the special fuel tax has not been previously paid, from fuel sources owned and controlled by the person into the fuel supply tank of a motor vehicle or commercial vehicle owned or controlled by the person.

Consolidated Location (08) - A separate license is required for each location where CNG is delivered into the fuel supply tank of a motor vehicle. For reporting purposes a licensee may file a separate return for each separately licensed location; or, if arrangements have been made with the Department, the licensee may file a consolidated return reporting all sales made at all locations for which a license is held. However, a consolidated return may not be used to combine dealer and user operations.

Tax Rate

The tax rate of CNG in Iowa is 16¢ per 100 cubic feet. (0.0016 per cubic foot)

- 100 CF = 1 CCF
- 1 Gallon = 126.67 cubic feet
- Calculating tax using gallons:
 1. Multiply the number of gallons by 126.67
 2. Multiply the result by 0.0016
 - Example: Gross Gallons = 401.81

$$401.81 \times 126.67 = 50,897$$
$$50,897 \times 0.0016 = \$81.44 \text{ (tax due)}$$

Collection and Remittance of the Tax

CNG fuel is not taxed until the use is determined. Tax attaches to CNG when it is delivered into equipment for compressing the gas for subsequent delivery into the fuel supply tank of a motor vehicle.

How to Remit the Tax

When the license application is approved, the applicant will be contacted by the department. A paper return and a paper check are filed each month.

More information on fuel taxes in Iowa can be found at the links listed below, or by contacting Julie Stokke (julie.stokke@iowa.gov) at (515)281-6447 or Barb Lewison (barbara.lewison@iowa.gov) at (515)281-3729.

Iowa Fuel Tax Website:

<http://www.iowa.gov/tax/educate/78509.html>

Current Iowa Fuel Tax Rate:

<http://www.iowa.gov/tax/taxlaw/taxtypes.html#mvf>

Iowa Motor Fuel Tax License Application:

<http://www.iowa.gov/tax/forms/80001.pdf>

IDR Rules:

<https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/05-30-2012.Chapter.701.69.pdf>

Iowa Department of Public Safety (IDPS)/ Division of the State Fire Marshal

Motor fuel-dispensing facilities and repair garages for compressed natural gas (CNG) fuel shall be in accordance with Sections 2208 and 2111 of Chapter 22 and Section 3003 of Chapter 30 of the International Fire Code. The actual regulations from the International Fire Code are available at <http://publicecodes.cyberregs.com/icod/ifc/2009/index.htm>. Below is a summary of these sections.

Chapter 22 – Motor Fuel-Dispensing Facilities and Repair Garages

Section 2208 Compressed Natural Gas Motor Fuel-Dispensing Facilities

Motor fuel-dispensing facilities for compressed natural gas (CNG) fuel shall be in accordance with this section and Chapter 30. Storage vessels and equipment used for storage, compression or dispensing of natural gas shall be approved or listed, and labeled. Dispensing operations and equipment shall be located above ground, and outdoors with some exceptions.

Private fueling shall be limited to the filling of permanently mounted fuel containers on CNG-powered vehicles. The owner of self-service CNG motor fuel-dispensing facility shall ensure the safe operation of the system and the training of users.

Pressure regulators shall be designed and installed or protected so that their operation will not be affected by the elements. Gas piping to equipment should have a readily accessible emergency shutoff valve. The shutoff valve shall be located within 25 ft and 75 ft from dispensers. A shutoff valve should also be provided in the compressor area. The discharge of CNG from motor vehicle cylinders shall be accomplished through a closed transfer system. Atmospheric venting of CNG shall be approved by a fire code official and should also have approved signage.

Section 2211 Repair Garages

Repair garages should have an approved mechanical ventilation system that runs constantly and is designed to utilize air supply inlets and exhaust outlets. The garage should also be continuously monitored by a natural gas detection system, which shall shut down the fueling system in the event of failure of the ventilation system. The detection system shall be listed or approved and shall be calibrated to the types of fuels and gases used by vehicles to be repaired.

Chapter 30 – Compressed Gases

Section 3003 General Requirements

CNG containers, cylinders and tanks shall comply with this section. They should be designed, fabricated, marked and maintained in accordance with the regulations of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section VIII.

Pressure relief devices shall be provided to protect containers, cylinders and tanks from rupture in the event of overpressure. They should be designed and sized in accordance with the specifications to which the container was fabricated, as well as arranged to discharge upward and unobstructed to the open air and located where moisture cannot collect.

The containers, cylinders and tanks should be marked with the name of the gas and visible from every direction, as well as in accordance with Sections 2703.5 and 2703.6. The piping systems shall be marked in accordance with ASME A13.1 at each valve.

Containers, cylinders and tanks should be secured against accidental dislodgement and unauthorized personnel using guard posts and other approved manners. They should be secured to prevent falling caused by contact, vibration or seismic activity, which can be completed using a number of different measures explained in Section 3003.5.3

The valves on the containers should be protected by means of caps, collars or similar devices that are attached. They should be in place at all times except when in use, being serviced or being filled.

Any compressed gas container should be separated from materials and conditions which pose exposure hazards to or from each other. Electrical wiring and equipment should comply with National Fire Protection Agency (NFPA) 70. Any service or repairs to be done on the container, valves, or pressure-relief devices shall be performed by trained personnel. Also, the containers and systems shall not be used for any purpose other than to serve as a vessel for containing the product.

Any container that has been exposed to fire should be removed from service by trained personnel. The same goes for leaking, damaged or corroded containers, unless they can be repaired to serviceable condition.

Compressed gas containers are allowed to be stored or used without being placed under overhead cover, unless in locations where extreme temperatures prevail. They should be protected from direct contact with soil or unimproved surfaces. The surfaces where they are placed shall be graded to prevent water accumulation. Approved lighting by natural or artificial means shall be provided. Also, generation, compression, storage and dispensing equipment for compressed gases shall be allowed to be located either above- or below-grade vaults.

Conclusion, Contacts and Resources

This document was completed using information received from the Iowa Utilities Board (IUB), Iowa Department of Agriculture and Land Stewardship (IDALS)/ Weights and Measures Bureau, Iowa Department of Revenue (IDR) and the Iowa Department of Public Safety (IDPS)/ Division of the State Fire Marshal, and compiled by the Iowa Clean Cities Coalition (ICCC). It was created as an Iowa-specific guide for Compressed Natural Gas (CNG) users, dealers and servicers looking to understand requirements and procedures of CNG and the equipment associated with it.

Iowa Utilities Board (IUB)

Contact:

Barb Oswalt

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(515) 725-7342

Resources:

Information, Administrative Rules, and Filing Instructions:

<http://www.state.ia.us/government/com/util/energy/cngp/cngp.html>

Current Certified Natural Gas Providers in Iowa:

<http://www.state.ia.us/government/com/util/docs/misc/CNGP/CNGPs.pdf>

CNGP Application Rules:

<http://www.state.ia.us/government/com/util/docs/misc/CNGP/199IAC19.14.pdf>

CNGP Application Form:

[http://www.state.ia.us/government/com/util/docs/misc/CNGP/199IAC2.2\(18\).pdf](http://www.state.ia.us/government/com/util/docs/misc/CNGP/199IAC2.2(18).pdf)

IUB's Electronic Filing System (EFS) Information:

<https://efs.iowa.gov/efs/>

Iowa Department of Agriculture and Land Stewardship (IDALS)

Contact:

Weights and Measures Bureau

(515) 725-1492

Resources:

Servicer's License Application

<http://www.agriculture.state.ia.us/weightAndMeasures/forms/ElectronicServicersApplication.pdf>

NIST Handbook 130

<http://ts.nist.gov/WeightsAndMeasures/Publications/H130-09.cfm>

NIST Handbook 44

<http://ts.nist.gov/WeightsAndMeasures/Publications/H44-09.cfm>

FTC Requirements

<http://business.ftc.gov/print/136>

Iowa Code Chapter 215

<http://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.215.pdf>

NIST Handbook 112

<http://ts.nist.gov/WeightsAndMeasures/h112pdf.cfm>

Rice Lake Equipment

www.ricelake.com

Iowa Department of Revenue (IDR)

Contacts:

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(515) 281-3729

Resources:

Iowa Fuel Tax Website:

<http://www.iowa.gov/tax/educate/78509.html>

Current Iowa Fuel Tax Rate:

<http://www.iowa.gov/tax/taxlaw/taxtypes.html#mvf>

Iowa Motor Fuel Tax License Application:

<http://www.iowa.gov/tax/forms/80001.pdf>

IDR Rules:

<https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/05-30-2012.Chapter.701.69.pdf>

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